

Serial No.: 09/511,548

REMARKS

Claims 1-3, 5 and 6 are now pending in the application. Claims 1, 2 and 5 have been amended herein to incorporate the features of claims 9-11, respectively. Claims 4 and 7-11 have been canceled. Favorable reconsideration of the application is respectfully requested in view of the following comments.

Applicants acknowledge with appreciation the withdrawal of the rejection set forth in the Office Action mailed on June 18, 2003.

I. REJECTION OF CLAIMS 1-11 UNDER 35 USC §103(a)

Claims 1-11 stand rejected under 35 USC §103(a) based on *Kumashiro* in view of *Mu-Tung et al.* Withdrawal of the rejection is respectfully requested for at least the following reasons.

i. Present Invention

Claims 1, 2 and 5, as amended, define an image reader and method in which a control section controls the readout section based on a difference between a first data of quantity of light of the first standard white board and a second data of quantity of light of the second standard white board. Such features were previously recited in claims 7-11, now canceled.

As is discussed in the present application, the difference between a first data of quantity of light of the first standard white board (e.g., step S14 in Fig. 8) and a second data of quantity of light of the second standard white board (e.g., step S18) is determined (e.g., step S19). The control section corrects the quantity of the irradiation light of the light source based on such difference (e.g., step S20).

ii. Mu-Tung et al.

The Examiner admits that *Kumashiro* does not teach correcting the quantity of irradiation light based on the reflected light from the white plates. (O.A., p. 2). However, the Examiner contends that *Mu-Tung et al.* describes such a feature.

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As noted above, amended claims 1, 2 and 5 recite how the present invention corrects the quantity of the irradiation light of the light source based on the difference between the quantity of light of the first standard white board and the quantity of light of the second standard white board.

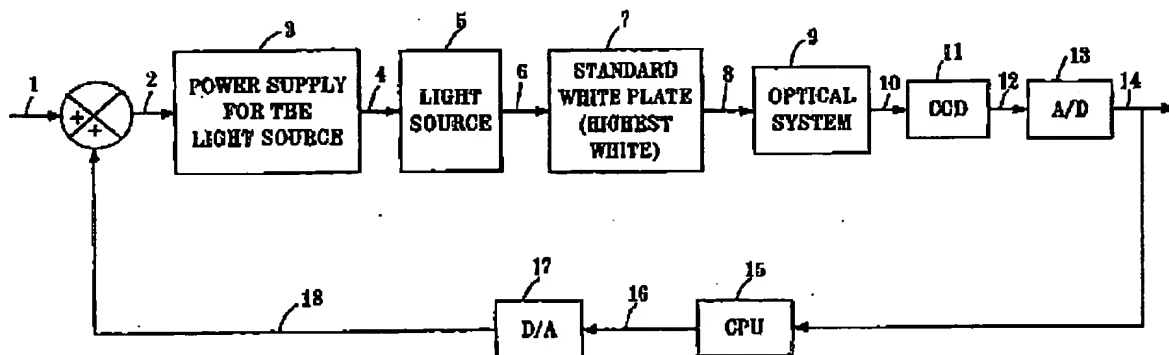


Fig. 2 of Mu-Tung et al.

In *Mu-Tung et al.*, a CPU 15 controls a power 4 of the power supply 3 in order to drive the light source 5. (See, Fig. 2 of *Mu-Tung et al.*, reproduced above). However, contrary to the claimed invention the CPU 15 controls the power to drive the light source 5 based on a difference between a *predetermined value* in the CPU 15 and a signal 14 derived from the reflected light of a standard white plate 7. Specifically, *Mu-Tung et al.* teaches that "the digital image output signal 14 is then supplied to the CPU. After signal 14 is compared to a predetermined value in the CPU 15 ... a digital control signal 16 is generated." (See, e.g., Col. 3, Ins. 44-50; and Col. 4, Ins. 4-7).

Thus, *Mu-Tung et al.* does not teach or suggest the feature of the present invention wherein the quantity of the irradiation light of the light source is corrected based on the difference between the quantity of light of the first standard white board and the quantity of light of the second standard white board. Rather, *Mu-Tung et al.* teaches controlling the light source 5 based on a comparison of light reflected from a white plate with a *predetermined value*. Accordingly, *Mu-Tung et al.* does not make up for the deficiencies in *Kumashiro*.

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Furthermore, it would not have been obvious to modify the teachings of *Kumashiro* and *Mu-Tung et al.* in order to result in the invention of amended claims 1, 2 and 5. *Mu-Tung et al.* is concerned with maintaining an optimum saturation voltage on an operational curve. (See, point C in Fig. 1). *Mu-Tung et al.* describes how different light sources may have deviation in brightness. Moreover, *Mu-Tung et al.* describes how CCDs may vary in photo-electric conversion rate. As a result of such variations, an optical scanner may experience a less than optimum saturation. (See, e.g., Col. 1, lns. 49-61; and Col. 3, ln. 56- Col. 4, ln. 9).

Thus, *Mu-Tung et al.* describes controlling the intensity of the light source in order to maintain the critical saturation voltage on the operational curve. If any combination of *Kumashiro* and *Mu-Tung et al.* was to be obvious, it would be to perform the feedback control of *Mu-Tung et al.* with respect to the first standard whiteboard of *Kumashiro* in order to eliminate adverse effects due to the deviation between different light sources or CCD scanners. It would not be obvious to perform the type of feedback recited in amended claims 1, 2 and 5.

As a result, withdrawal of the rejection is respectfully requested.

II. CONCLUSION

Accordingly, all claims 1-3, 5 and 6 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.


Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

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Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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DATE: February 18, 2004

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